

What is claimed is:

1. A ferroelectric material for forming a ferroelectric that is described by a general formula ABO_3 , the ferroelectric material comprising an A-site compensation component which compensates for a vacancy of an A site, and a B-site compensation component which compensates for a vacancy of a B site.

2. The ferroelectric material as defined in claim 1,
wherein each of the A-site compensation component and the B-site compensation component is an oxide which includes Si or Ge in constituent elements or an oxide which includes Si and Ge in constituent elements.

3. The ferroelectric material as defined in claim 1, comprising constituent elements for lead zirconate titanate,
wherein an element which becomes a divalent state and an element which becomes a trivalent state are added as the A-site compensation component.

4. The ferroelectric material as defined in claim 3,
wherein an element which becomes a pentavalent state is added as the B-site compensation component.

5. The ferroelectric material as defined in claim 3,
wherein a lanthanoid series element is added as the element which becomes a trivalent state.

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6. The ferroelectric material as defined in claim 4,
wherein a lanthanoid series element is added as the element which becomes a

trivalent state.

7. A method of manufacturing a ferroelectric film, comprising using the ferroelectric material as defined in claim 1.

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8. The method of manufacturing a ferroelectric film as defined in claim 7, comprising:

forming a ferroelectric material film by stacking a plurality of raw material layers using the ferroelectric material; and

10 performing a heat treatment for forming initial crystal nuclei in each of the raw material layers.

9. The method of manufacturing a ferroelectric film as defined in claim 8,

wherein the heat treatment is performed by using a rapid thermal annealing

15 method.

10. The method of manufacturing a ferroelectric film as defined in claim 7,

wherein the ferroelectric film is formed by crystallizing the ferroelectric material film by applying a heat treatment to the ferroelectric material film.

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11. A method of manufacturing a ferroelectric capacitor including forming a lower electrode, a ferroelectric film and an upper electrode on a base, the method comprising:

forming a ferroelectric material film by stacking a plurality of raw material layers using the ferroelectric material as defined in claim 1; and

25 performing a heat treatment for forming initial crystal nuclei in each of the raw material layers.

12. The method of manufacturing a ferroelectric capacitor as defined in claim 11, wherein the heat treatment is performed by using a rapid thermal annealing method.

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13. The method of manufacturing a ferroelectric capacitor as defined in claim 11, wherein the ferroelectric film is formed by crystallizing the ferroelectric material film by applying a heat treatment to the ferroelectric material film.

10 14. A ferroelectric capacitor manufactured by using the method of manufacturing a ferroelectric capacitor as defined in claim 11.

15. A ferroelectric memory comprising the ferroelectric capacitor as defined in claim 14.

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16. A piezoelectric device comprising the ferroelectric capacitor as defined in claim 14.